

U.S. Serial No. 10/574,796
Family No. P2003J077 (GJH-0325)
Response to Non-Final Office Action

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REMARKS / ARGUMENTS

In the present Office Action, Examiner has rejected Claims 1-10 as originally submitted.

In response to Examiner's objections and rejections, claim amendments and support for such amendments are submitted herein.

OBJECTIONS UNDER 37 CFR §1.75(d)(1) and MPEP §608.01(o)

Examiner's Position

The Examiner has objected to the specification as originally submitted as not providing proper antecedent basis to the claimed subject matter. In particular, the Examiner has objected to the term "substantially uniform cross-sectional area" as utilized in Claim 1 as not being supported by the specification. It is Examiner's position that the cross-sectional area of the particle conduit and the non-circular conduit are described as being equal (see Specification, page 3, lines 8-9).

Applicants' Position

In response to the Examiner's objections, Claim 1 has been currently amended to wherein the existing term "substantially uniform cross-sectional area" has been replaced with the proper term "substantially equal cross-sectional area". Support for this amendment is found in the specification as submitted on the last line of page 2 (part of Paragraph [0007]).

Examiner is therefore respectfully requested to withdraw this objection.

CLAIM OBJECTIONS

Examiner's Position

The Examiner has objected to Claim 8 because of the informality that Claim 8 recites the limitation "wherein the feed injector nozzles at angles of 20 to 90 degrees in the direction of flow" which appears to be a mistyping of "wherein the feed injector nozzles *are* at angles *from* 20 to 90 degrees *from* the direction of flow".

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Applicants' Position

In response to the Examiner's objections, Claim 8 has been amended. Support for the amendment can be found in Paragraph [0024] of the specification as submitted.

Examiner is therefore respectfully requested to withdraw this objection.

CLAIM REJECTIONS UNDER 35 USC § 112

Examiner's Position

The Examiner has rejected Claims 1-10 under 35 USC 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter of the invention.

Examiner's Position - Claim 1

The Examiner has rejected Claim 1 under 35 USC 112, second paragraph, as it is the Examiner's position that it is unclear what is meant by the limitation "the particle conduit and the non-circular conduit have a substantially uniform cross-section".

Applicants' Position - Claim 1

In response to the Examiner's rejection of Claim 1 under 35 USC 112 (as well as addressed above in Examiner's objection under 37 CFR §1.75(d)(a) and MPEP §608.01(o)), Claim 1 has been currently amended to wherein the term "substantially uniform cross-sectional area" has been replaced with the proper term "substantially equal cross-sectional area". Support for this amendment is found in the specification as submitted on the last line of page 2 (part of Paragraph [0007]).

Examiner is therefore respectfully requested to withdraw this rejection.

Examiner's Position - Claim 5

The Examiner has rejected Claim 5 under 35 USC 112, second paragraph, as it is the Examiner's position that it is unclear what is meant by the limitation "the axial flow of catalyst" as there appears to be no antecedent basis or qualification of this term.

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Applicants' Position - Claims 5, 7 and 8

In response to the Examiner's rejection of Claim 5 under 35 USC 112, Claim 5 has been currently amended to change the term "catalyst" (which has no proper antecedent basis in the claims) to the term "the fluidized particles" (which does have proper antecedent basis in the claims). Claims 7 and 8 have similar issues with lacking proper antecedent bases, and therefore, applicants' have similarly currently amended Claims 7 and 8 herein.

Although explicit support cannot be found in the specification, it is clear to one of skill in the art that the terms "fluidized particles" and "catalyst or fluidized catalyst" are used interchangeably in the specification.

The Examiner is therefore respectfully requested to withdraw this rejection.

Examiner's Position - Claim 8

The Examiner has rejected Claim 8 under 35 USC 112, second paragraph, as it is the Examiner's position that Claim 8 recites the limitation "the feed injector nozzles" for which there is no literal antecedent basis in the claims. Examiner does note that the terms "feed nozzles" and "injector nozzles" are used in the prior claims.

Additionally, regarding Claim 8, the Examiner is of the opinion that the term "in the direction of flow" is unclear.

Applicants' Position - Claim 8

In response to the Examiner's rejection of Claim 8 under 35 USC 112, Claim 8 has been currently amended to change the term "feed injector nozzles" to the term "injector nozzles" which has the proper antecedent basis. As can be seen, this original error was due to a mistyped term combining both the terms "feed nozzles" and "injector nozzles" utilized in the prior claims.

In response to Examiner's rejection under 35 USC 112, Claim 8 has also been currently amended to change the term "in the direction of flow" to "in the direction of the axial flow of the fluidized particles in the injection zone". Support for this amendment can be found in Paragraph [0024] of the specification as submitted and the terminology of the prior

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claims upon which Claim 8 depends, with the exception that, as discussed prior, it is clear to one of ordinary skill in the art that the terms "fluidized particles" and "catalyst or fluidized catalyst" are used interchangeably in the specification and are equivalents.

The Examiner is therefore respectfully requested to withdraw this rejection.

Examiner's Position - Claim 9

The Examiner has rejected Claim 9 under 35 USC 112, second paragraph, as it is the Examiner's position that Claim 8 is unclear by what is meant by the limitation "optimal penetration".

Applicants' Position - Claims 9 and 10

In response to the Examiner's rejection of Claim 9 under 35 USC 112, applicants have currently canceled Claim 9.

Since Claim 10 was dependent upon original Claim 9, Claim 10 has been presently been currently amended to depend from Claim 4.

The Examiner is therefore respectfully requested to withdraw this rejection.

ADDITIONAL AMENDMENTS

Claim 3

Applicants have also currently amended Claim 3 in that there was an obvious typographical error in Claim 3 as originally presented. The term "wherein the non-circular is ellipsoidal" has been replaced with the term "wherein the non-circular conduit is ellipsoidal". As can be seen, this is an obvious typographical error and the present amended language provides Claim 3 with the proper literal antecedent basis.

The Examiner is therefore respectfully requested enter this amendment.

CONCLUSION

Applicants respectfully request the Examiner to enter and consider the amendments and arguments as presented herein and pass the claims as presently amended to allowance.

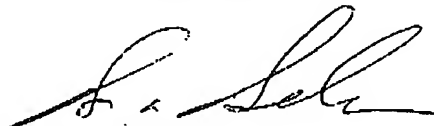
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If the Examiner has any questions regarding this application, or would like to discuss this paper in greater detail, Applicants invite the Examiner to contact the undersigned attorney at the information listed below.

Please grant any extensions of time required to enter this response and charge any additional required fees to our Deposit Account No. 05-1330.

Respectfully submitted



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☒ Pursuant to 37 CFR 1.34(a)

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